

Applicant: Teresa Hunkeler
Application No.: 10/601,786

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for determining thresholds for evaluating ~~inter-system~~ handovers in a wireless communication system network, ~~the method comprising the steps of:~~

determining a first quality level of a first digital duplexing type based on the threshold value for intra-system handover of the first digital duplexing type;

determining a second quality level of a second digital duplexing type based on the coverage report from a plurality of multi-mode wireless transmit/receive units (WTRUs);

comparing the quality levels to determine whether to handover from the first digital duplexing type to the second duplexing type;

initiating a handover from the first duplexing type to the second duplexing type if the first quality level is below a first threshold and the second quality level is above a second threshold.

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2. (currently amended) The method of claim 1, wherein a wireless ~~transmit and receive unit being evaluated for handover~~ WTRU is operating in the first digital duplexing type and the first quality level of the first digital duplexing type is determined by using primary channel signal levels.

3. (previously presented) The method of claim 2, wherein the second quality level of the second digital duplexing type is determined using secondary channel signal levels derived from an estimated quality of a non-used frequency.

4. (Original) The method of claim 1, wherein the first digital duplexing type is time division duplex and the second digital duplexing type is frequency division duplex.

5. (Original) The method of claim 1, wherein the first digital duplexing type is frequency division duplex and the second digital duplexing type is time division duplex.

6. (currently amended) The method of claim 1, wherein the first quality level of the first digital duplexing type is based on a received signal code power of a primary common control physical channel; and

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the second quality level of the second digital duplexing type is based on information provided by ~~WTRUs~~ a WTRU regarding the extent of coverage of the second digital duplexing type.

7. (currently amended) A method for determining thresholds for evaluating ~~inter-system~~ handovers between a first duplexing type and a second duplexing type in a wireless communications ~~system~~ network, the method comprising ~~the steps of~~:

determining a first minimum quality level for the first duplexing type based on ~~the a~~ threshold value for intra-system handover of the first digital duplexing type;

determining a second minimum quality level for the second duplexing type based on ~~the a~~ coverage report received from a plurality of multi-mode wireless transmit/receive units (WTRUs);

comparing the first minimum quality level with a first threshold and comparing the second minimum quality level with a second threshold; and

initiating a handover from the first duplexing type to the second duplexing type if the first minimum quality level is below the first threshold and the second minimum quality level is above the second threshold.

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8. (currently amended) The method of claim 7, wherein the first threshold is an average value of the first minimum quality level values, and the second threshold is an average value of the second minimum quality level values.

9. (Original) The method of claim 7, wherein the first threshold and the second threshold are percentile values.

10. (Original) The method of claim 7, wherein the first duplexing type is Time Division Duplex and the second duplexing type is Frequency Division Duplex.

11. (currently amended) The method of claim 10, wherein the determining a first minimum quality level step includes calculating a received signal code power of a primary common control physical channel.

12. (currently amended) The method of claim 10, wherein the determining a second minimum quality level step includes calculating a received signal code power of a common pilot channel.

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13. (currently amended) The method of claim 10, wherein the determining a second minimum quality level step includes calculating a signal-to-noise ratio of a common pilot channel.

14. (Original) The method of claim 7, wherein the first duplexing type is Frequency Division Duplex and the second duplexing type is Time Division Duplex.

15. (currently amended) The method of claim 14, wherein the determining a first minimum quality level step includes calculating a received signal code power of a common pilot channel.

16. (currently amended) The method of claim 14, wherein the determining a first minimum quality level step includes calculating a signal-to-noise ratio of a common pilot channel.

17. (currently amended) The method of claim 14, wherein the determining a second minimum quality level step includes calculating a received signal code power of a primary common control physical channel.

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18. (Original) The method of claim 7, wherein the first duplexing type and the second duplexing type are the same, and the handover is between different cells of the same duplexing type.

19. (currently amended) A system radio network controller (RNC) for determining thresholds for evaluating inter system handovers between a first duplexing type and a second duplexing type, the RNC in a wireless communications system, the system comprising:

a plurality of multimode wireless transmit and receive units (WTRUs) capable of operating in both the first duplexing type and the second duplexing type;

a radio network controller (RNC), said RNC including

setting means for setting a first minimum quality level for the first duplexing type;

instructing means for instructing each of the plurality of WTRUs to a receiver configured to receive from a wireless transmit/receive unit (WTRU) a report of the extent of coverage of the second duplexing type; and

a processor configured to set a first minimum quality level for the first duplexing type, and to decide

deciding means for deciding whether to handover a WTRU from the first duplexing type to the second duplexing type if the first minimum quality level

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for the first duplexing type is below a first threshold and a second minimum quality level for the second duplexing type is above a second threshold ; and
~~at least one base station communicating between said plurality of WTRUs and said RNC.~~